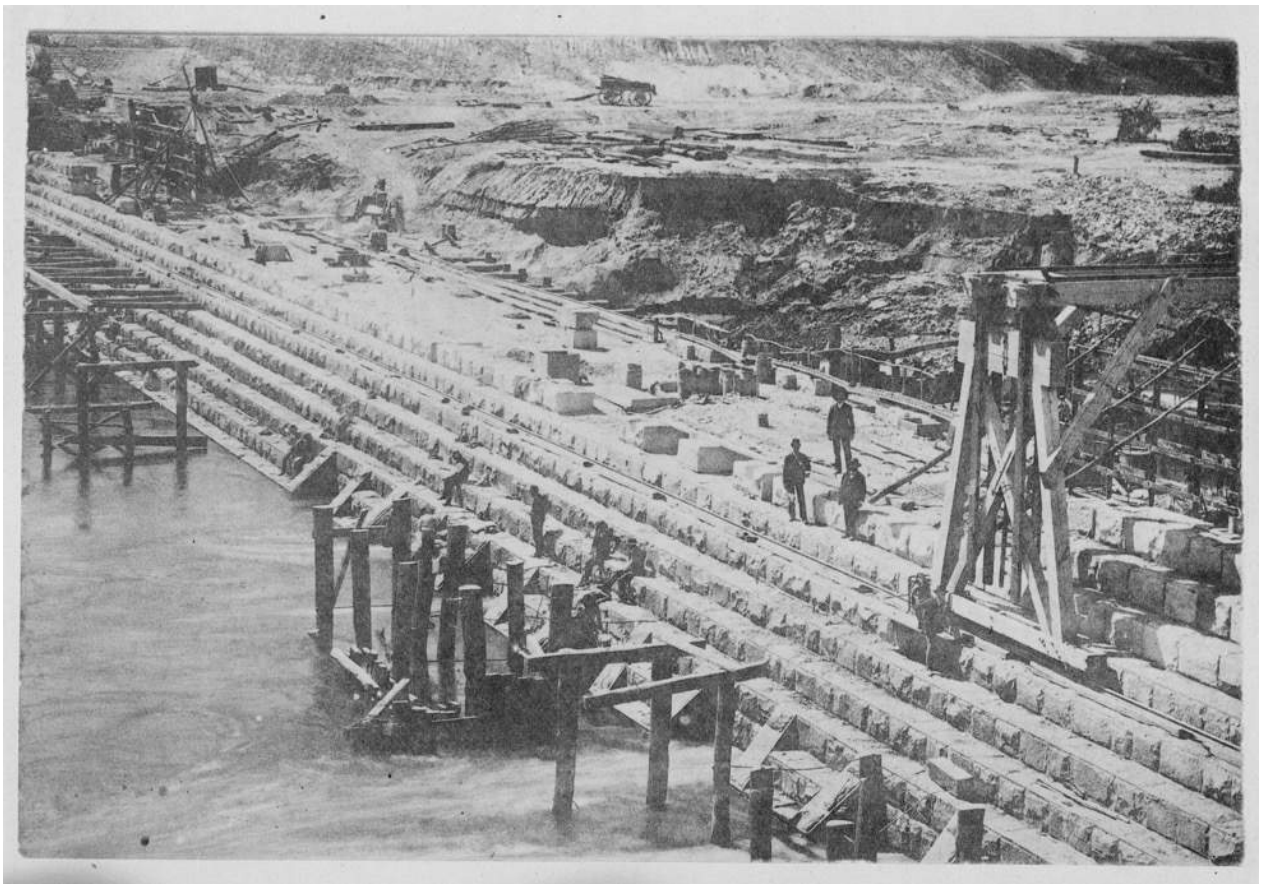
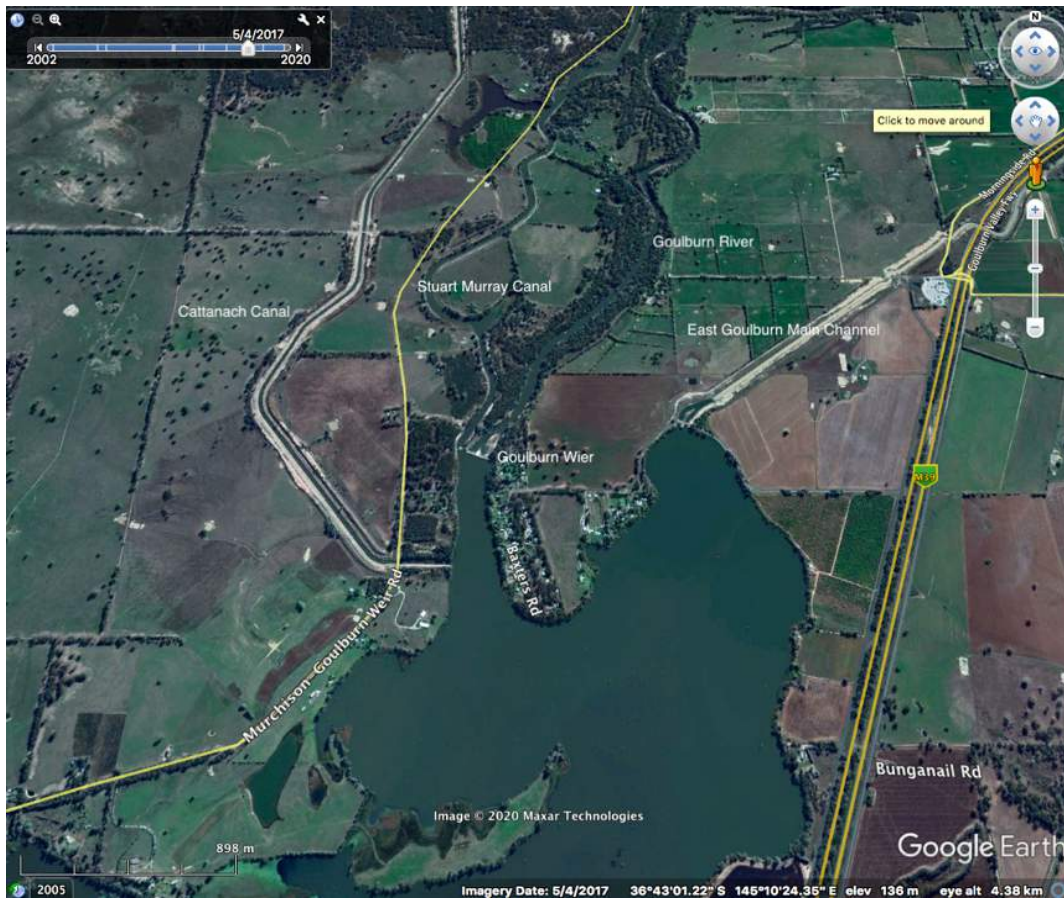


ENGINEERING HERITAGE AUSTRALIA
ENGINEERING HERITAGE VICTORIA
NOMINATION
for
ENGINEERING HERITAGE RECOGNITION
GOULBURN WEIR & ADJOINING WORKS
Photographs & Illustrations



Weir during construction 1889

SLV Pictures collection FL189205032



Marked-up Google Earth image showing the weir location and offtake channels.



Marked-up Google Earth image of the weir and the Stuart Murray Canal.



State Rivers & Water Supply Commission bronze plaque at weir site.



Downstream face of main section of refurbished weir showing toe plinth and radial gates.



Downstream face of refurbished weir from east side showing toe plinth and radial gates. Rebuilt vertical gates on angled section of wall on west side with old dynamo house alongside.



Reconstructed vertical gates viewed from upstream side.



Reconstructed vertical gates viewed from downstream side.



Retained hand winches and line shafting for operation of reconstructed vertical gates



Closeup of hand winch showing gear clutch for linking to former turbine driven line shafts



Bevel gear drive onto screw shaft on one of the reconstructed vertical gates. Top of wells for water turbines beyond. Turbine line shaft at left whilst near shaft is from the winch assembly.



Upstream side of Stuart Murray Canal regulator structure showing concreted former vertical pin butterfly gates. Stop log structure for the four 1967 radial gates in middle.



Downstream side of Stuart Murray canal regulating structure. 1980s radial gates in middle.



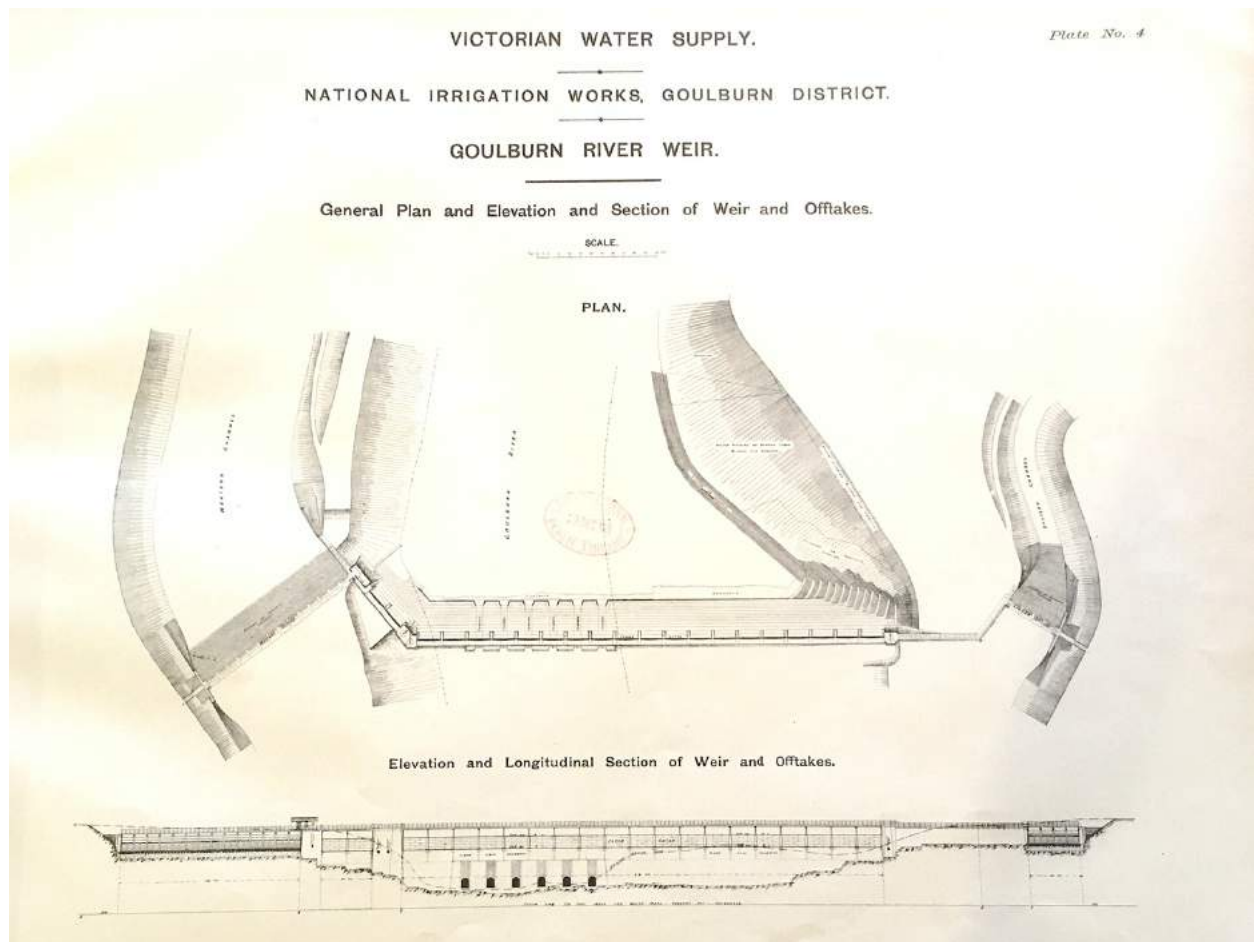
Operating pedestals for vertical pin butterfly gates on regulating structure walkway shortly before their removal in 2016.



New access walkway with travelling gantry crane parked at eastern end.

East end former turbine well at right reused for water level monitoring.

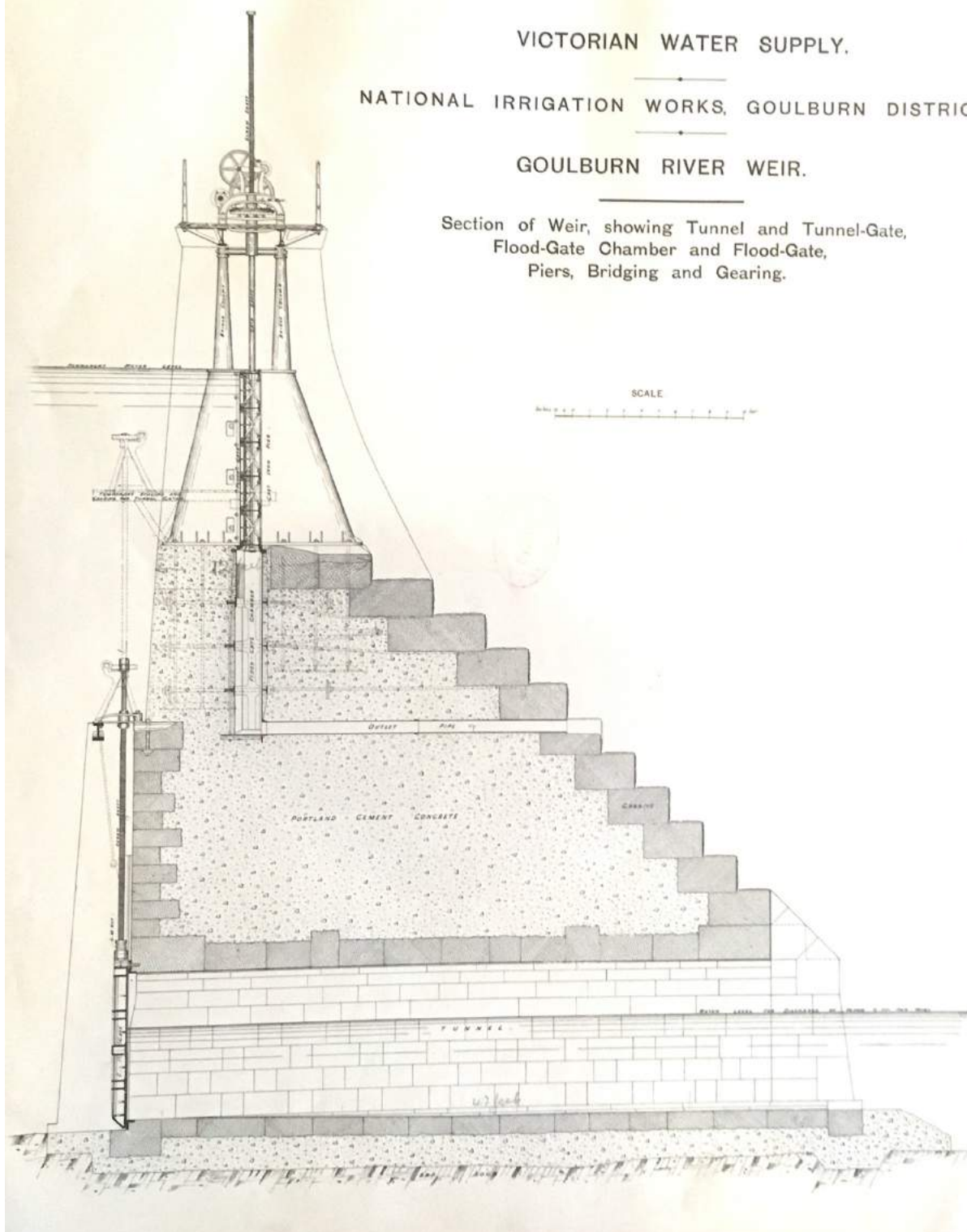
Illustrations from Murray's 1893 'Descriptive Memorandum'



VICTORIAN WATER SUPPLY.
NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.

GOULBURN RIVER WEIR.

Section of Weir, showing Tunnel and Tunnel-Gate,
Flood-Gate Chamber and Flood-Gate,
Piers, Bridging and Gearing.



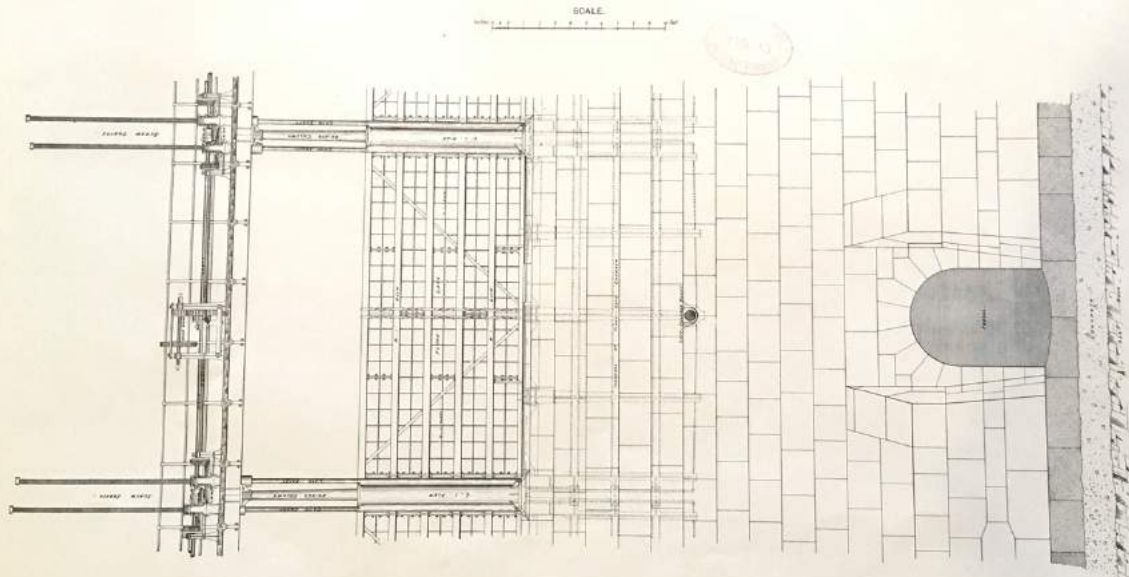
VICTORIAN WATER SUPPLY.

Plate No. 9.

NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.

GOULBURN RIVER WEIR.

Down-stream Elevation, showing Tunnel Outlet, Flood-Gate and Ironwork of Chamber, Piers, Bridging and Gearing, &c.



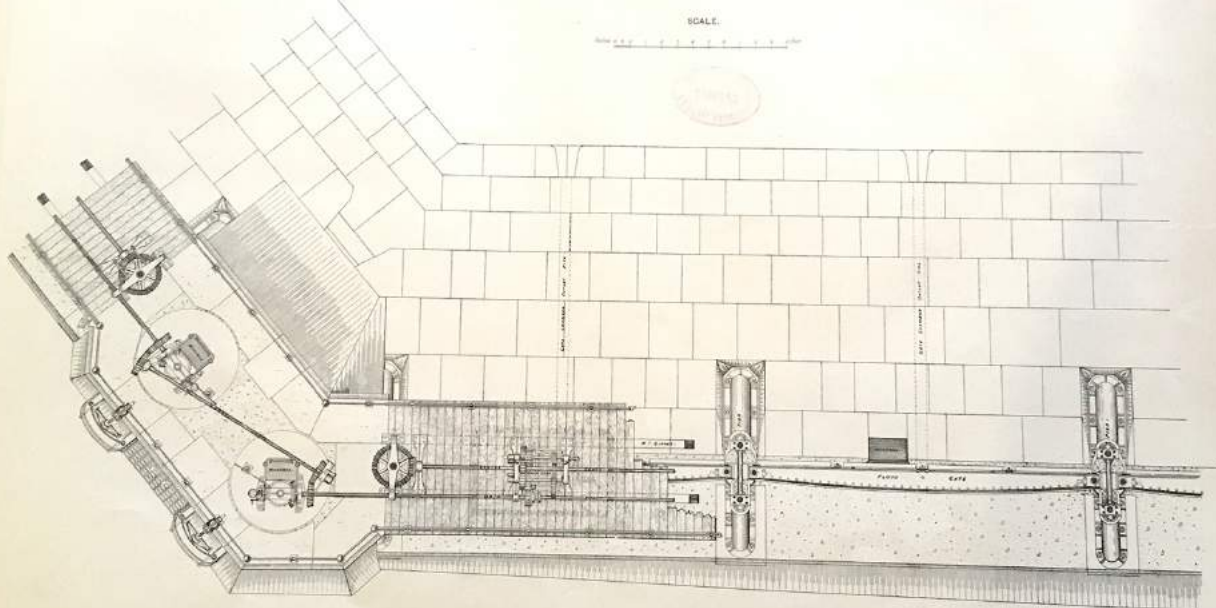
VICTORIAN WATER SUPPLY.

Plate No. 10.

NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.

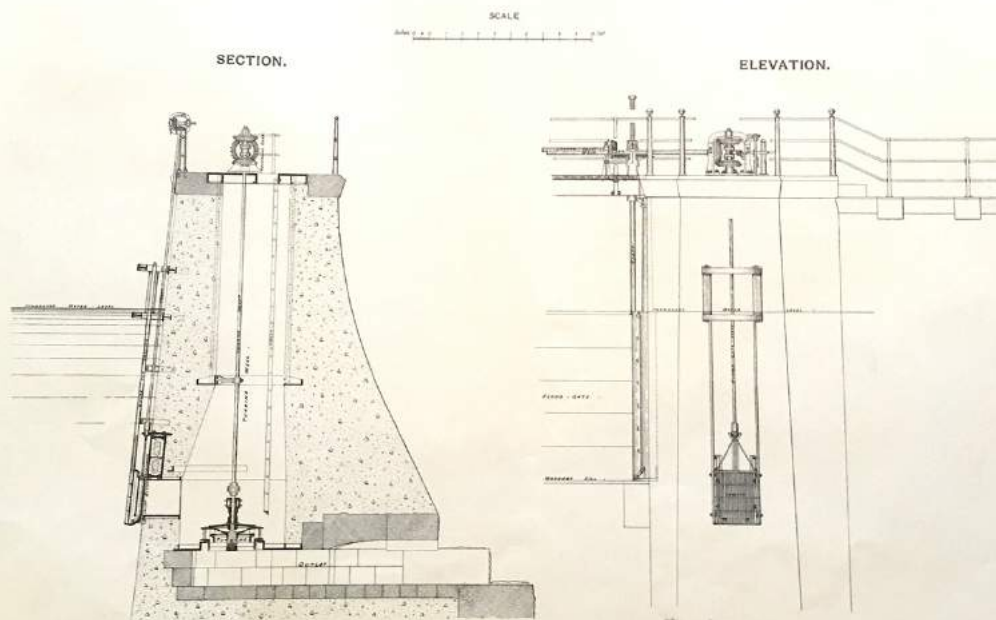
GOULBURN RIVER WEIR.

Plan showing Turbine Wells, Flood-Gates, Piers, Bridging and Gearing, &c.



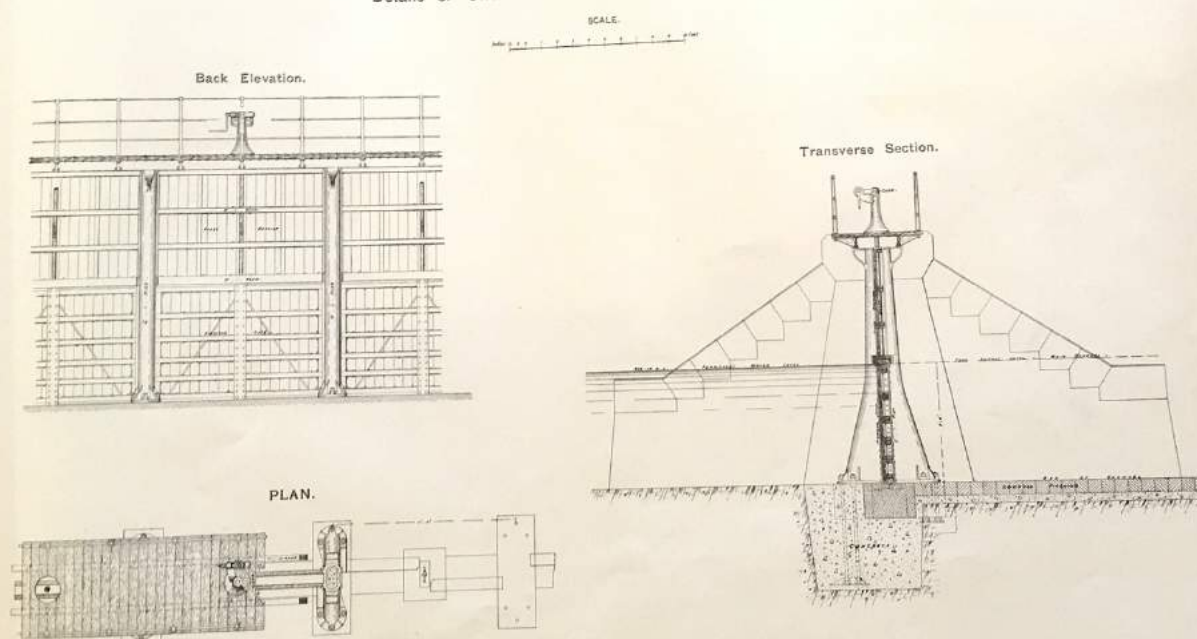
VICTORIAN WATER SUPPLY.
 NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.
 GOULBURN RIVER WEIR.

Section showing Turbine Well, Turbine, Inlet Sluice and Gearing, and Elevation of Inlet Sluice, &c.



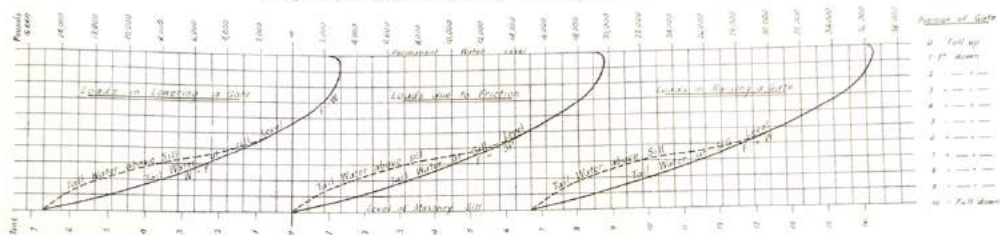
VICTORIAN WATER SUPPLY.
 NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.
 GOULBURN RIVER WEIR.

Details of Offtake-Gates, Piers, Bridging, and Gearing.

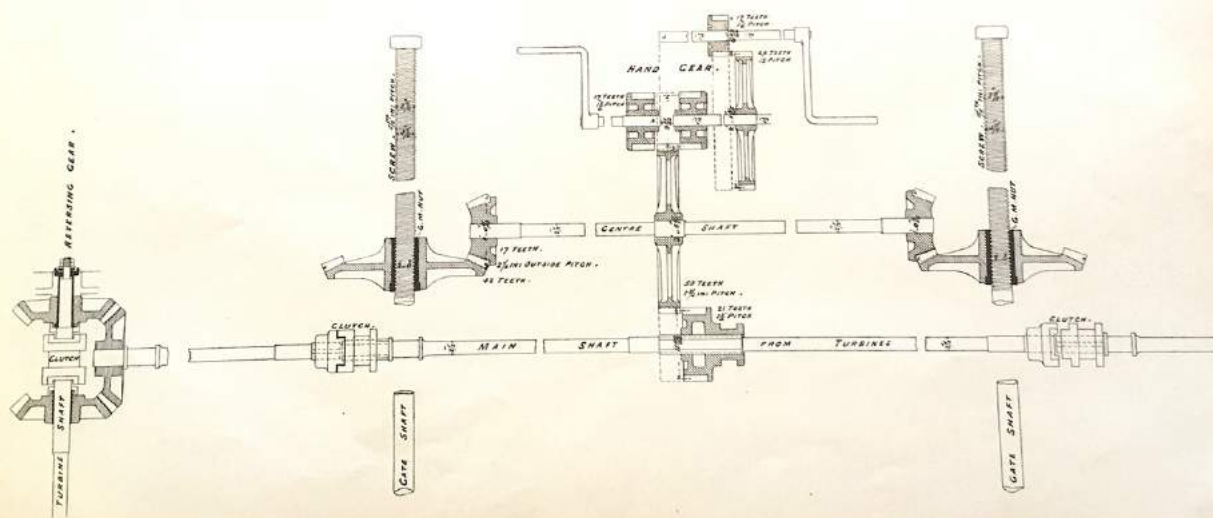


VICTORIAN WATER SUPPLY. NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT. GOULBURN RIVER WEIR.

Diagram of Loads in working Flood Gates and Sketch of Gearing.



Notes — Intersection of horizontal and vertical lines on the curves gives respectively the position of the head of the gate and the corresponding load.
P = Pressure of water on Gate. F = Friction of working faces = .3P.
W = Weight of Gate and shafts less loss of Weight for displacement of water in chamber.



VICTORIAN WATER SUPPLY.
NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.
Goulburn River Weir.



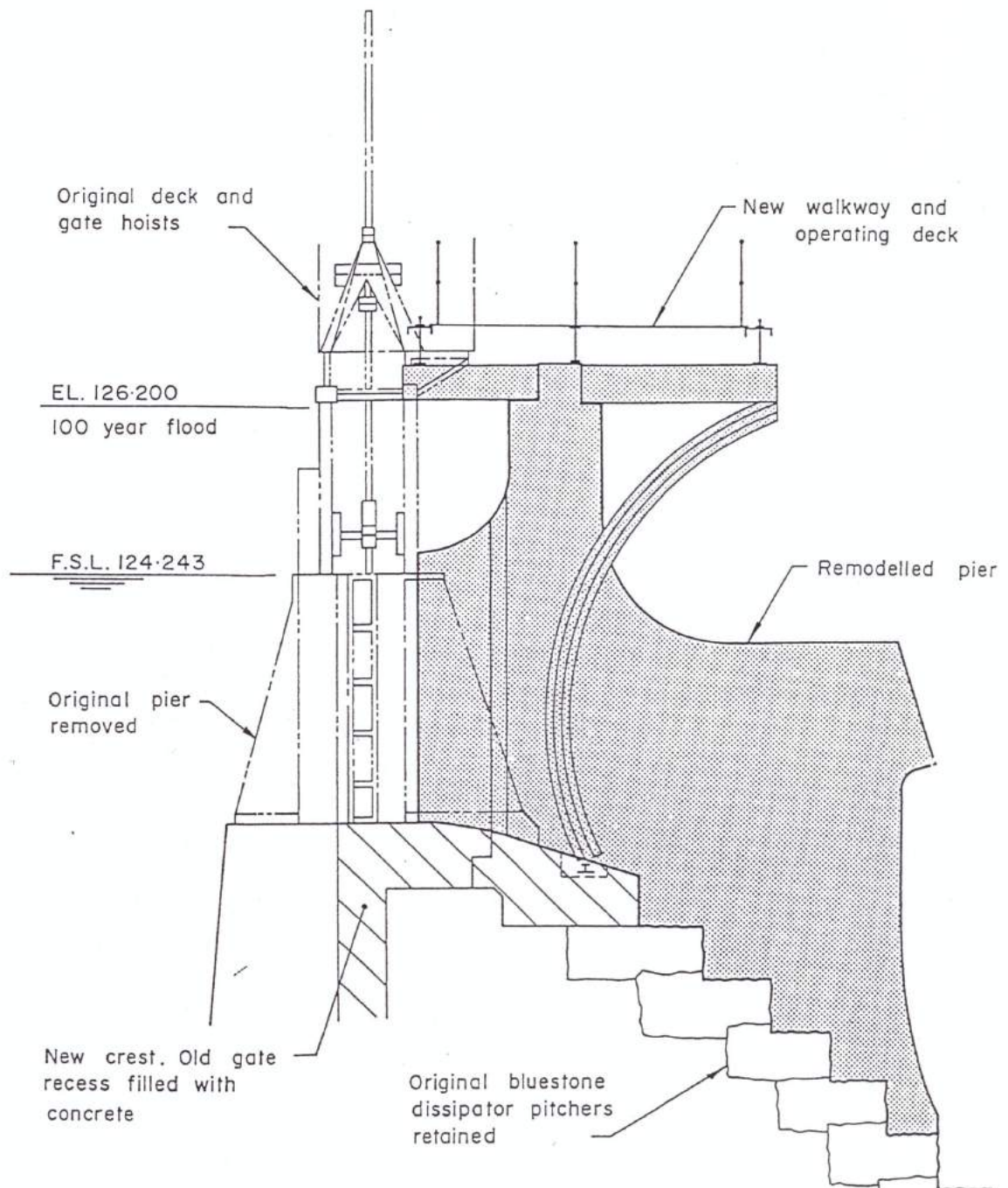
Rear View from East Bank.

VICTORIAN WATER SUPPLY.
NATIONAL IRRIGATION WORKS, GOULBURN DISTRICT.
Goulburn River Weir.



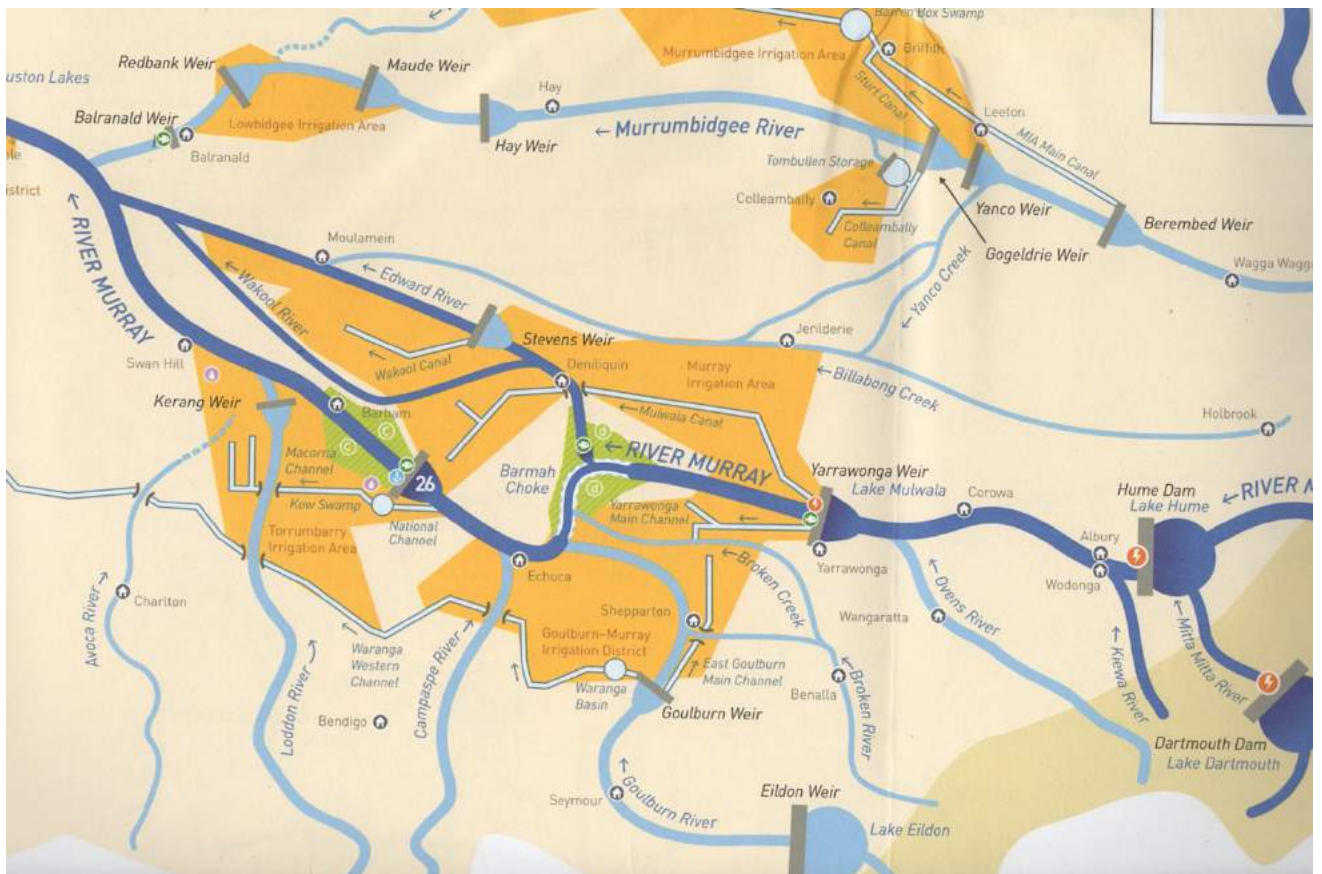
View from East Bank.

FLOOD OF JULY, 1891.



Weir section showing 1980s remodelled pier and deck to accommodate new radial gates

From RWC 1988 Engineering Excellence Award Submission



Part of Murray Darling Basin Authority Map (MDBA 37/11) showing the Goulburn-Murray Irrigation District, the Goulburn Weir and the Waranga Western Channel